

## **REMARKS**

In the Office Action<sup>1</sup>, the Examiner:

1. rejected claim 17 under 35 U.S.C. § 101 as being directed to non-statutory subject matter;
2. rejected claims 1-6, 11-17 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 6,081,619 to Hashimoto et al. ("*Hashimoto*");
3. rejected claim 7 under 35 U.S.C. § 103(a) as being unpatentable over *Hashimoto* in view of U.S. Patent Application Publication No. 2003/0058111 to Lee et al. ("*Lee*"); and
4. rejected claims 18-19 under 35 U.S.C. § 103(a) as being unpatentable over *Hashimoto* in view of U.S. Patent No. 5,703,368 to Tomooka et al. ("*Tomooka*");

By this Amendment, Applicant has amended claims 1-2, 4-7, 11, 15-19, and added new claims 20-23. The amendments are fully supported by the original specification. See, e.g., specification, p. 8, lines 17-21 and p.11, lines 12-26.

Applicant respectfully requests reconsideration and withdrawal of the rejections, and timely allowance of the pending claims for at least the reasons set forth below.

### **Rejection of Claim 17 under 35 U.S.C. § 101**

Applicant respectfully traverses the rejection of claim 17 under 35 U.S.C. § 101. However, solely to advance prosecution, Applicant has amended claim 17 to recite "A non-transitory computer-readable storage medium tangibly embodied in a storage device storing instructions which, when executed by a processor, perform an information recognition method." In view of the above, Applicant respectfully requests

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<sup>1</sup> The Office Action may contain statements characterizing the related art, case law, and claims. Regardless of whether any such statements are specifically identified herein, Applicant declines to automatically subscribe to any statements in the Office Action.

that the Examiner reconsider and withdraw the rejection of claim 17 under 35 U.S.C. § 101.

**Rejection of Claims 1-6, 11-17 under 35 U.S.C. § 102(b)**

Applicant respectfully traverses the rejections of claims 1-6 and 11-17 under 35 U.S.C. § 102 as being anticipated by *Hashimoto*. In order to properly establish that *Hashimoto* anticipates Applicant's claimed invention under 35 U.S.C. § 102, each and every element of each of the claims in issue must be found, either expressly described or under principles of inherency, in that single reference. Furthermore, "[t]he identical invention must be shown in as complete detail as is contained in the ... claim." See M.P.E.P. § 2131, quoting *Richardson v. Suzuki Motor Co.*, 868 F.2d 1126, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). None of *Mukai*, *Lippincott*, *Gallatin*, and *DeMaris* discloses each and every element of Applicant's claims 1-6 and 11-17.

Independent claim 1, as amended, recites a combination including, for example, "a signal processor for dividing an output waveform into a plurality of time-series frames, and calculating feature data by frequency processing the time-series frames in accordance with a predetermined modeling method" (emphasis added). *Hashimoto* fails to teach at least this element.

The Office asserted that *Hashimoto* discloses "a thermal radiation detection means for detecting, by a thermal radiation sensor, thermal radiation emitted from an object-to-be-detected having plural different pieces of attribute information existing in a detection range," citing col. 9, lines 15-17 and 40-65; col. 28, lines 8-20; Fig. 4 and Figs. 31(a)-(c) for support. See Office Action, pp. 2-3. Without acquiescing to this assertion, Applicant respectfully submits that neither the portions cited by the Office, nor any other

portions of the cited references teach “a signal processor for dividing an output waveform into a plurality of time-series frames, and calculating feature data by frequency processing the time-series frames in accordance with a predetermined modeling method,” as recited in claim 1.

Specifically, *Hashimoto* relates to upper and lower limit thresholds being set based upon the temperature of the floor surface detected by the sensor head 21. As shown in Fig. 17, if the value is larger than the upper limit threshold, 1 is given as binary-coded data; if the value is smaller than the lower limit threshold, -1 is given as the binary-coded data, and 0 is given in the other cases. When the output value from sensor head 21 is higher or lower than the threshold values, the existence of a human body is determined. However, there is no teaching in *Hashimoto* relating to “an output waveform...[dividing] into a plurality of time-series frames, and calculating feature data from a result of frequency processing of each of the plurality of time-series frames.”

In view of the above, *Hashimoto* fails to teach “a signal processor for dividing an output waveform acquired from the thermal radiation detection unit into a plurality of time-series frames, and calculating feature data from a result of frequency processing of each of the plurality of time-series frames,” as recited in claim 1. For at least this reason, *Hashimoto* fails to teach each and every element of claim 1, and thus cannot anticipate claim 1. Accordingly, claim 1 is allowable.

Independent claims 16, 17, and 20, although different in scope from independent claim 1, recite elements similar to those of claim 1. As such, for reasons similar to those discussed in regard to the rejection of claim 1, claims 16-17 and 20 are not anticipated by the cited references. Claims 2-7 and 11-15, 18-19, 21-23 are also not

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anticipated by the cited references, at least by virtue of their dependence from claims 1, 16-17 or 20.

Therefore, Applicant respectfully requests that the Examiner reconsider and withdraw the rejections of claims 1-6 and 11-17 under 35 U.S.C. § 102.

**Rejection of Claim 7 under 35 U.S.C. § 103(a)**

Applicant respectfully traverses the rejection of claim 7 under 35 U.S.C. § 103(a) as being unpatentable over *Hashimoto* in view of *Lee*. A *prima facie* case of obviousness has not been established.

The key to supporting any rejection under 35 U.S.C. § 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. See M.P.E.P. § 2142, 8th Ed., Rev. 6 (Sept. 2007). “[T]he framework for the objective analysis for determining obviousness under 35 U.S.C. § 103 is stated in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966). The factual inquiries...[include determining the scope and content of the prior art and]...[a]scertaining the differences between the claimed invention and the prior art.” M.P.E.P. § 2141(II). In rejecting a claim, “Office personnel must explain why the difference(s) between the prior art and the claimed invention would have been obvious to one of ordinary skill in the art.” M.P.E.P. § 2141(III). In this application, a *prima facie* case of obviousness has not been established because the Office Action has neither properly determined the scope and content of the prior art nor properly ascertained the differences between the prior art and the claimed combinations.

As discussed above, *Hashimoto* do not teach or suggest an information recognition device comprising “a signal processor for dividing an output waveform into a

plurality of time-series frames, and calculating feature data by frequency processing the time-series frames in accordance with a predetermined modeling method,” as recited in independent claim 1. *Lee* does not compensate for the deficiencies of *Hashimoto* as discussed above. That is, *Lee* does not teach or suggest at least “a signal processor for dividing an output waveform into a plurality of time-series frames, and calculating feature data by frequency processing the time-series frames in accordance with a predetermined modeling method,” as recited in independent claim 1 and included in claim 7.

In view of the above, the Office Action has neither properly determined the scope and content of the prior art nor properly ascertained the differences between the prior art and the claimed invention. Moreover, the Office Action has failed to clearly articulate a reason why the claims would have been obvious to one of ordinary skill in view of the prior art. Therefore, a *prima facie* case of obviousness has not been established for claim 7 at least due to its dependence from allowable independent claim 1.

**Rejection of Claims 18-19 under 35 U.S.C. § 103(a)**

Applicant respectfully traverses the rejection of claims 18-19 under 35 U.S.C. § 103(a) as being unpatentable over *Hashimoto* in view of *Tomooka*. A *prima facie* case of obviousness has not been established.

As discussed above, *Hashimoto* does not teach or suggest an information recognition device comprising “a signal processor for dividing an output waveform into a plurality of time-series frames, and calculating feature data by frequency processing the time-series frames in accordance with a predetermined modeling method,” as recited in independent claim 1. *Tomooka* does not compensate for the deficiencies of *Hashimoto*

as discussed above. That is, *Tomooka* also fails to teach or suggest at least “a signal processor for dividing an output waveform into a plurality of time-series frames, and calculating feature data by frequency processing the time-series frames in accordance with a predetermined modeling method,” as recited in independent claim 1 and included in claims 18-19.

In view of the above, the Office Action has neither properly determined the scope and content of the prior art nor properly ascertained the differences between the prior art and the claimed invention. Moreover, the Office Action has failed to clearly articulate a reason why the claims would have been obvious to one of ordinary skill in view of the prior art. Therefore, a *prima facie* case of obviousness has not been established for claims 18-19 at least due to their dependence from allowable independent claim 1.

## **CONCLUSION**

In view of the foregoing amendments and remarks, Applicant respectfully requests reconsideration and reexamination of this application and the timely allowance of the pending claims.


Please grant any extensions of time required to enter this response and charge any additional required fees to Deposit Account 06-0916.

Respectfully submitted,

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